

[METHOD OF MANUFACTURING NON-VOLATILE MEMORY CELL]

Abstract

A method of manufacturing a non-volatile memory cell is described. The method includes forming a first dielectric layer on a substrate and then forming a patterned mask layer with a trench on the first dielectric layer. A pair of charge storage spacers is formed on the sidewalls of the trench. The patterned mask layer is removed and then a second dielectric is formed on the substrate covering the pair of charge storage spacers. A conductive layer is formed on the second dielectric layer and subsequently patterned to form a gate structure on the pair of charge storage spacers. Portions of the second and first dielectric layers outside the gate structure are removed and then a source/drain region is formed in the substrate on each side of the conductive gate structure.